AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Previously Presented) A method for operating a torque-converter lockup clutch (20) for a hydrodynamic torque converter (1), where the slip of the torque converter (1) is adjusted using a setpoint value (sw), while the torque-converter lockup clutch (20) is being closed, the setpoint value (sw) being continuously selected inside a closing interval after the initiation of said closing interval, as a function of time, and taking into account the input torque (E) currently applied to the torque converter (1).

2. (Original) The method as recited in Claim 1, where, for the time-dependence of the setpoint value (sw), a preselected time characteristic is taken into account, which converts the slip existing at the beginning of the closing interval as an initial value, into a target value, within the closing interval.

3. (Original) The method as recited in Claim 2, where a linear transition from the initial value to the target value is provided as a time characteristic inside the closing interval.

4. (Previously Presented) The method as recited in Claim 2, where the input torque (E) applied to the torque converter (1) is monitored inside the closing interval; in response to the input torque (E) changing by more than a specifiable tolerance deviation, the slip of the torque converter (1) being ascertained and taken as a basis for a new initial value, which would appear at this input torque (E) in the case of a completely opened torque-converter lockup clutch (20).

5. (Original) The method as recited in Claim 4, where the value resulting from the preselected time characteristic for the current time inside the closing interval is selected as the setpoint value (sw) for the slip, the time characteristic converting the initial value ascertained using the currently applied input torque (E) into the target value.

6. (Previously Presented) The method as recited in Claim 4, where the slip to be used as a new initial value, as a basis for the applied input torque (E) is determined using a stored characteristics map.

7. (Previously Presented) The method as recited in Claim 4, where the slip to be used as a new initial value, as a basis for the applied input torque (E) is calculated from the applied input torque (E), taking a performance figure of the torque converter (1) into consideration.

8. (Previously Presented) The method as recited in Claim 1, where, in order to adjust the slip, a controlled parameter is provided for setting a clamping pressure for the torque converter.

9. (Previously Presented) The method as recited in Claim 1, where the time characteristic of the slip is monitored for a decline, in order to detect the start of power transmission in the torque-converter lockup clutch (20).

10. (Original) The method as recited in Claim 9, where, after a decrease in the slip is detected, a clamping pressure for the torque converter (1) is set as a function of a coupling torque to be transmitted, and as a function of the setpoint value (sw) for the slip of the torque-converter lockup clutch (20).

11. (Previously Presented) A control device (24) for a torque-converter lockup clutch (20) for a hydrodynamic torque converter (1), where a sensor (32) for detecting the input torque (E) applied to the torque converter (1) is connected to a control unit (26), which selects a setpoint value (sw) for the slip of the torque converter (1) inside a closing interval after the initiation of said closing interval as a function of time, and taking into consideration the input torque (E) currently being applied to the torque converter (1) inside the closing interval.

12. (Original) The control device (24) as recited in Claim 11, whose control unit (26) is connected on the output side to means for setting a clamping pressure for the torque converter (1).

13. (Previously Presented) The control device (24) as recited in Claim 11, whose control unit (26) is connected to date storage unit (36), in which a time characteristic for the setpoint value (sw) of the slip is stored, a slip existing at the beginning of a closing interval as an initial value being converted into a target value within the closing interval, in accordance with the time characteristic for the setpoint value of the slip.

14. (Original) The control device (24) as recited in Claim 13, in whose data storage unit (36) a data record is stored, from which a slip value can be derived for each input torque (E), the slip value being intended to be used as an initial value, as a basis for determining the setpoint value (sw) for the slip as a function of time.

15. (Original) The control device (24) as recited in Claim 13, in whose data storage unit (36) a characteristics map is stored, which, inside specifiable interval boundaries, assigns each performance figure of the torque converter (1) a corresponding slip value.

16. (Previously Presented) A method for operating a torque-converter lockup clutch for a hydrodynamic torque converter, comprising:
adjusting the slip of the torque converter in accordance with a setpoint value while closing the torque-converter lockup clutch, the setpoint value continuously selected inside a closing interval after the initiation of said closing interval as a function of time and taking into account the input torque currently applied to the torque converter .

17. (Previously Presented) The method as recited in Claim 16,
wherein a preselected time characteristic is taken into account for the time-dependence of the setpoint value, said time characteristic converting the slip existing at the beginning of the closing interval as an initial value into a target value within the closing interval.

18. (Previously Presented) The method as recited in Claim 17,
wherein the time characteristic includes a linear transition from the initial value to the target value inside the closing interval.

19. (Previously Presented) The method as recited in Claim 17, further comprising monitoring the input torque applied to the torque converter inside the closing interval, said monitoring including ascertaining the slip of the torque converter and taking said slip of the torque converter as a new value when the input torque changes by more than a specifiable tolerance deviation, said new value appearing at this input torque in the case of a completely opened torque-converter lockup clutch.

20. (Previously Presented) The method as recited in Claim 19,
further comprising selecting the value resulting from the preselected time characteristic for the current time inside the closing interval as the setpoint value for the slip, the time characteristic converting the initial value ascertained using the currently applied input torque into the target value.

21. (Previously Presented) The method as recited in Claim 19,
wherein the slip to be used as a new initial value and as a basis for the applied input torque is determined using a stored characteristics map.

22. (Previously Presented) The method as recited in Claim 19,
wherein the slip to be used as a new initial value and as a basis for the applied input torque is calculated from the applied input torque taking into account the performance figure of the torque converter.

23. (Previously Presented) The method as recited in claim 17,
further comprising providing a controlled parameter for setting a clamping pressure for the torque converter for adjusting the slip.

24. (Previously Presented) The method as recited in Claim 17,
further comprising detecting the start of power transmission in the torque-converter lockup clutch by monitoring the time characteristic of the slip for a decline.

25. (Previously Presented) The method as recited in Claim 24,

further comprising setting a clamping pressure for the torque converter as a function of a coupling torque to be transmitted after a decrease in the slip is detected and as a function of the setpoint value for the slip of the torque-converter lockup clutch.

26. (Previously Presented) A control device for a torque-converter lockup clutch for a hydrodynamic torque converter, comprising:

a control unit; and

a sensor connected to the control unit, said sensor configured to detect input torque applied to the torque converter, said control unit configured to select a setpoint value for the slip of the torque converter inside a closing interval after the initiation of said closing interval as a function of time and taking into consideration the input torque currently being applied to the torque converter.

27. (Previously Presented) The control device as recited in Claim 26,

wherein the control unit is connected on an output side to an arrangement configured to set a clamping pressure for the torque converter.

28. (Previously Presented) The control device as recited in Claim 26,

wherein the control unit is connected to a data storage unit configured to store a time characteristic for the setpoint value, said control unit configured to convert a slip existing at the beginning of a closing interval as an initial value into a target value within the closing interval in accordance with the time characteristic for the setpoint value of the slip.

29. (Previously Presented) The control device as recited in Claim 28,

wherein a data record is stored in the data storage unit, said control unit configured to derive from the data record a slip value for each input torque and in accordance with said slip value as an initial value and as a basis to determine the setpoint value for the slip as a function of time.

30. (Previously Presented) The control device as recited in Claim 28,

wherein the data storage unit includes a characteristics map, which, inside specifiable interval boundaries, includes a slip value for each corresponding performance figure of the torque converter.

31. (New) A method for transitioning a torque-converter lockup clutch from an open state to a closed state, comprising the steps of:

adjusting the clutch slip during a closing interval to a setpoint value according to a desired predetermined setpoint value time characteristic; and

continuously adjusting the predetermined setpoint value time characteristic within the closing interval taking into consideration the input torque currently being applied to the torque converter.